MULTIMEDIA UNIVERSITY

STUDENT IDENTIFICATION NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2016/2017

BFM1014 – FUNDAMENTALS OF FINANCE

(All sections / Groups)

19 OCTOBER 2016
2.30 PM – 4.30 PM
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This Question paper consists of 5 pages with 4 Questions only.
2. Attempt **ALL** questions. All questions carry equal marks and the distribution of the marks for each question is given.
3. Please write all your answers in the Answer Booklet provided.

Answer ALL FOUR (4) questions. All questions carry equal marks and the distribution of the marks for each question is given.

QUESTION 1

A. Based on your understanding, explain the differences between accounting and finance.

(6 marks)

B. Erin Gilberts hopes to purchase a new car in five years. If she deposits RM 10,000 today in an account that pays 7% compounded quarterly, how much will she be able to spend on the new car in five years?

(4 marks)

C. Abby's grandfather has left her RM 150,000 in a trust fund that she cannot have for another seven years. Abby have decided that she really needs the money now to pay for her college expenses. Abby's sister offers her RM 80,000 in exchange of the trust fund. If the current interest rate is 10%, should she accept her sister's offer?

(5 marks)

D. Assume that North Energy Corporation has just issued bonds with a stated coupon of RM 100 (a coupon rate of 10%) and a yield-to-maturity of 15%. The bonds mature in three years and the next coupon is due in one year. What is the fair price for the bond today?

(10 marks)

[TOTAL 25 MARKS]

QUESTION 2

A. Cost of capital can be defined as the average payment rate for the use of capital funds by a firm. In determining capital budget, acceptance of a project depends on the discount rate used and this discount rate can be considered as the cost of capital too. Briefly explain FOUR (4) factors that may influence cost of capital.

(8 marks)

B. If the price of Iguana Handbags Inc. stock is RM 43, its required return is 20%, and the last dividend was RM 3, what is its dividend growth rate? (Round to the nearest tenth.)

(5 marks)

C. Ghostbuster Corp. just paid a dividend of RM 2.00. Over the next two years, this dividend is expected to growth by 20% per year. After two years, dividend growth is expected to be constant at 10%. If the required rate of return on Ghostbuster's stock is 12%, what should be the price of Ghostbuster's stock today?

(7 marks)

D. Alpha Co. owns retail stores that market home building supplies. Omega Inc. builds single family homes in residential developments. Alpha Co. has a beta of 1.22 and Omega Inc. has a beta of 1.34. The risk-free rate of return is 4 percent and the market risk premium is 6.5 percent. What should Alpha Co. use as their cost of equity if they decide to purchase some land and create a new residential community?

(5 marks)

[TOTAL 25 MARKS]

QUESTION 3

A. There are number of evaluation techniques which can be used to determine whether a project can be accepted or rejected. List and briefly discuss FIVE (5) evaluation techniques.

(10 marks)

B. Heavy Crane Rental Corporation has been "selling nothing but service" since 1980. They offer service across Malaysia and Singapore and specialize in turnkey projects providing both equipment and certified labor. They are considering the purchase of a new RM 175,000 crane. If they expect the cash inflows to be RM 45,000 after the first year, RM 76,000 after the second year, and RM 80,000 after the third year, what is the NPV if the cost of capital is 15%? Based on your NPV analysis, should they invest in the new crane? (Round answer to the nearest whole dollar amount).

(5 marks)

C. Minicraft's Construction Co. has 80,000 bonds outstanding that are selling at par value. Bonds with similar characteristics are yielding 8.5 percent. The company also has 4 million shares of common stock outstanding. The stock has a beta of 1.1 and sells for RM 40 a share. The Treasury bill is yielding 4 percent and the market risk premium is 8 percent. Minecraft's tax rate is 35 percent. What is Minicraft's weighted average cost of capital?

(10 marks)

[TOTAL 25 MARKS]

QUESTION 4

A. Uptown Construction is comparing two different capital structures. Plan I would result in 23,000 shares of stock and RM 320,000 in debt. Plan II would result in 17,000 shares of stock and RM 260,000 in debt. The interest rate on the debt is 10 percent. Ignoring taxes, what is Uptown Construction's Earnings Before Interest and Tax (EBIT) if EPS will be identical for Plans I and II.

(4 marks)

B. Happy Family's Store has an accounts receivable period of 45 days, average inventory of RM 15,000 and average account payable of RM 12,500. The cost of goods sold of the store is RM 50,000. Calculate Accounts Payable Period, Operating Cycle and Cash Cycle for Happy Family's Store.

(9 marks)

C. A Magic Beauty company has predicted annual sales of 2500 units, an ordering cost of RM 35, and a carrying cost of RM 1.75 per unit. How many orders should they make this year?

(6 marks)

D. Cash refers to money and a firm's bank account balance in a bank. As can be seen in the arrangement of a balance sheet, cash is the most liquid asset. Briefly explain THREE (3) motives why firms hold cash.

(6 marks)

[TOTAL 25 MARKS]

Continued...

APPENDIX

Future Value:

$FV = PV(1 + r)^t$

Annuities

$$PV = PMT\left[\frac{1-\frac{1}{(1+r)^t}}{r}\right]$$

$$FV = PMT\left[\frac{(1+r)^t - 1}{r}\right]$$

Perpetuity: PV = PMT / r

EAR & APR

$$EAR = \left[1+\frac{APR}{m}\right]^m - 1$$

$$APR = m\left[(1+EAR)^{1/m} - 1\right]$$

Bond Pricing

$$\text{Bond Value} = C\left[\frac{1-\frac{1}{(1+YTM)^t}}{YTM}\right] + \frac{F}{(1+YTM)^t}$$

Stock Value

$$\hat{P}_0 = \sum_{t=1}^{\infty}\frac{D_t}{(1+R)^t}$$

Estimating Dividends

Zero growth: $P_0 = D / R$

Constant Growth Stock: $D_t = D_0(1+g)^t$

Dividend Growth Model:

$$\hat{P}_0 = \frac{D_0(1+g)}{R-g} = \frac{D_1}{R-g}$$

Nonconstant + Constant growth

$$\hat{P}_0 = \frac{D_1}{(1+R)^1} + \frac{D_2}{(1+R)^2} + \frac{D_3}{(1+R)^3} + \ldots + \frac{D_\infty}{(1+R)^\infty}$$

Net Present Value

$$NPV = \sum_{t=0}^{n}\frac{CF_t}{(1+R)^t} - CF_0$$

Cost of equity

$$R_E = R_f + \beta_E(E(R_M) - R_f)$$

WACC

$= E/V \times R_E + P/V \times R_P + D/V \times R_D(1 - T_C)$

Operating cycle

= inventory period + accounts receivable period

Cash Cycle

= Operating Cycle – Accounts payable period

EOQ Model

$$Q^* = \sqrt{\frac{2TF}{CC}}$$

End of Page.